

How standards nurture innovation in the cold light of dawn

Many a flash of inspiration, many a hot, new idea, when examined in the cold light of dawn is found to face serious practical barriers to their implementation. Brilliant ideas for innovative products and technologies can be so far ahead of their time that even a commonly understood terminology for communicating them may be lacking.

However, for brain-storming new ideas and bringing them to market in record time, few business areas can rival information technology. Fittingly therefore, it was Watts Humphreys, a key thinker on the management of software development, who said: "Innovation is the process of turning ideas into manufacturable and marketable form."

A similar point was made by Theodore Levitt, the Harvard Business School professor and author who as early as 1973 made the connection between standardization and the then unfamiliar term of "globalization", when he said: "Creativity is thinking up new things. Innovation is doing new things."

Today, the need for creativity and innovation is being recognized not only in business and academic circles, but by the world's political and economic leaders, as indicated by the choice of "The Creative Imperative" as the theme for this year's World Economic Forum, which took place last month at Davos, Switzerland. The organizers stated: "It is imperative that we learn how to unleash our creative potential to tackle the world's problems."

We in ISO have something to contribute. Our speciality is developing standards that provide the link between "creative potential" (great ideas) and "tackling problems" (practical implementation). Standardization begins with a creative vision: to transform valued criteria such as quality, ecology, safety, economy, reliability, compatibility, interoperability, efficiency and effectiveness into real attributes of products and services. ISO

standards help great ideas to survive the contact with practical realities and support their growth to maturity as "manufacturable and marketable" products.

ISO's track record provides numerous examples. To take one from the IT field, the MPEG series of standards for the digital coding of audio and visual signals has encouraged the growth of business sectors offering thousands of new products and services in such areas as digital television and photography, mobile telephones, music via the Web and personal audio.

"Global challenges need global solutions"

Standardization ensures agreement about essential characteristics such as terminology, safety, performance, compatibility and interoperability. This creates the conditions for new markets to take root and grow, while allowing individual organizations free rein to their creativity in developing differentiated product offerings.

If standardization really stifled innovation in business and technology – as some mistakenly believe – ISO would not in recent years have welcomed new industries such as nanotechnologies, hydrogen technologies, and health and transport informatics. These sectors have turned to ISO for the international standards they need to facilitate the dissemination of innovative technologies and to help structure markets for them.

Today's products are increasingly the culmination of global supply chains that need to be aligned. Early standardization of basic, essential characteristics of products allows this alignment to take place efficiently and effectively. In today's interconnected world, International Standards can provide internationally harmonized solutions to global challenges that are too large for any one company to solve on its own.

Global challenges need global solutions and ISO, through its national members and organizations in liaison, has a unique framework for bringing together the international expertise that can develop these solutions, and for disseminating them in an orderly and effective manner. ISO standards also ensure that innovative solutions can be transferred to developing countries so that the benefits are also available on a global basis.

Innovative technologies, interconnectivity and global availability raise issues related to intellectual property rights. By allowing patent technologies to be embedded and signalled in its standards, under fair and non-discriminatory conditions, ISO is ensuring the continuing interplay between innovation and standardization, and that great ideas are brought to market.

ISO standards ensure that innovation survives the reality test. For innovation, standardization transforms the cold light of dawn into a bright new day.



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